

**SYSTEM AND METHOD FOR PURGING DATABASE UPDATE IMAGE FILES AFTER  
COMPLETION OF ASSOCIATED TRANSACTIONS FOR A DATABASE  
REPLICATION SYSTEM WITH MULTIPLE AUDIT LOGS**

**ABSTRACT**

A method and system for purging database update image files after completion of associated transactions for a database replication system with multiple audit logs. Audit update records and audit backout records are generated by the primary system, and are transmitted to the backup system in multiple streams in parallel. The backup system stores the received audit records as audit image trails, and applies the audit updates and audit backouts to the backup database without regard to whether the associated transactions committed or aborted. Because audit updates and audit backouts are applied without regard to whether the associated transactions committed or aborted, image files containing audit records associated with transactions that have not yet committed or aborted must not be purged. The present invention provides for a method for determining whether an image trail file contains audit records that can be purged such that image trail files can be safely deleted.